



CHARLES D. BAKER
Governor

KARYN E. POLITO
Lieutenant Governor

The Commonwealth of Massachusetts
Executive Office of Health and Human Services
Department of Public Health
Bureau of Health Care Safety and Quality
Medical Use of Marijuana Program
99 Chauncy Street, 11th Floor, Boston, MA 02111

MARYLOU SUDDERS
Secretary

MONICA BHAREL, MD, MPH
Commissioner

Tel: 617-660-5370
www.mass.gov/medicalmarijuana

Title: Protocol for Sampling and Analysis of Finished Medical Marijuana Products and Marijuana-Infused Products for Massachusetts Registered Medical Marijuana Dispensaries

Exhibit 5.
Minimum Analysis Requirements for Residues of Pesticides and Plant Growth Regulators Commonly Used in Cannabis Cultivation

Pesticide	Use	Residue Analytical Methods
Bifenazate	Acaricide	LC; LC-MS/MS
Bifenthrin (synthetic pyrethroid)	Insecticide	GC-ECD; GC-MS/MS
Cyfluthrin (synthetic pyrethroid)	Insecticide	LC; GC-MS/MS
Etoxazole	Acaricide	GC-MS(/MS)
Imazalil	Fungicide	GC-ECD; LC-MS/MS
Imidacloprid	Insecticide	LC-MS/MS
Myclobutanil	Fungicide	GC-ECD; GC-NPD; GSMS/MS; LC-MS/MS
Spiromesifen	Insecticide	GC-MS; LC-MS/MS
Trifloxystrobin	Fungicide	GC-NPD; GC-MS/MS; LC-MS/MS

Source AHP (2013)

ECD = Electron capture detector; FLD = Fluorescence detector; GC = Gas chromatography; MS = Mass spectrometry; NPD = Nitrogen phosphorous detector; LC = Liquid chromatography

Please note that these Protocols are continually evaluated and revised based upon new scientific and industry information.